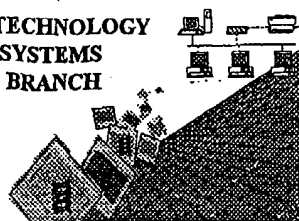


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/404,520A
Source: 1600
Date Processed by STIC: 1/7/2004

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221

Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03



1600

RAW SEQUENCE LISTING

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

2 <110> APPLICANT: Cao, Yongwei

3 Ghodssi, Azita

4 Hinkle, Gregory J.

5 McIninch, James

6 Timberlake, William E.

7 Yu, Jaehyuk

9 <120> TITLE OF INVENTION: Emericella nidulans Genome Sequence and Uses Thereof

11 <130> FILE REFERENCE: 38-10(15498)A

OK 13 <140> CURRENT APPLICATION NUMBER: US/09/404,520A

OK 13 <141> CURRENT FILING DATE: 1999-09-23

E--> 13 <160> NUMBER OF SEQ ID NOS: 44345

44347 (p.14)

pp 1-16
 Not Comply
 with the Disclosure

ERRORED SEQUENCES

1357 <210> SEQ ID NO: 24

1358 <211> LENGTH: 1314

1359 <212> TYPE: DNA

1360 <213> ORGANISM: Aspergillus nidulans <2207

1362 <223> OTHER INFORMATION: unsure at all n locations

OK 1363 <400> SEQUENCE: 24

1365 ttgtgcattc cgtaaattctc tcaggatagt ttagtaggcc tggcttttag ggttcgatga 60

1367 gacaatgtaa cagtctaggt gtgacaccaa tttctagaaa acactgtagt caggataaag 120

1369 gtaacagcca gtcaatgcag cggacaagac agactccatt aggcataaag gctaacagtc 180

OK 1371 cccggtcacc ttcaagaagc ctaccatcga ntgcgtagcgc tggaaatgct gttacagggg 240

1373 cccaccttag cagcaaagag gacagtacaa ccagcagtc tttaaaggagc cagacgggac 300

1375 tggcaggtta gctcatcagg caggcagctg ggtagaatag ccacttcgc gagacgaagc 360

1377 tcgacatggc ggtacgagga atggaataga agatctgaat cgtgactggg ggtgagaagc 420

1379 gctgtttcat gtttggttt cgttctaata cctcccgac tataaaagga gtgtgtctc 480

1381 cctcaatcat ctgttttagct tcaatttgcc tcatgtgcat taatagtatt tgtggcggtt 540

1383 tgttcaaggt gcctgtgtgc tcgaactgcc ttgccatagt cgtactgtat tacaccacta 600

1385 tgacttttcc ctgggtttact gacaatcaca taccctaaaca aatatcatta ttcttgctag 660

1387 gaactccgcc tccaacttcc accatcaatc cgaactgaag ccgagaaaag gtttaagtga 720

1389 tgcgagatac gacggccgcg gcagatacgg tttcatagac gccacccggt aggtgggcga 780

1391 tcacaatatg atgtttttca gttcgccaaa ttcgtaagca ttgaaatcat tgacctggtg 840

1393 aggtggagtg tgggatttgc cgagcagcgc gcgagcggct gccgcgcga acggcaagc 900

1395 acagatccac gcgatcggtt ttgtcaagcg tgagggaagc catgatcggc ggggatacac 960

1397 cggaaaagac tgaagctctt cgcaataata acgttttcag gatagaagga ttcccgtagc 1020

1399 ctgaattata gaaaaaagat cagcagctgg gggaaaaaag agggtaatca ggtcctgcaa 1080

1401 ggctgactcg tcgactgac caccaattac cttggcatat acgccaatc acttctgcga 1140

1403 tcatcaacga caggaagaca tgtcctgcaa gggtcagcac agacacgaag cagttgacac 1200

1405 cagtcaggct tcaaagcatg taggctcacc gcgcagcatc acagcaatga tgctagagac 1260

1407 tctttgtaat catctgcga atcaccctt tgactatatt ataaaaatga cgct 1314

insert the mandatory numeric
 identifier whenever
 <2217, <2227, or <2237
 is shown

RAW SEQUENCE LISTING

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

1554 <210> SEQ ID NO: 28

1555 <211> LENGTH: 1135

1556 <212> TYPE: DNA

1557 <213> ORGANISM: *Aspergillus nidulans*

1559 <223> OTHER INFORMATION: unsure at all n locations

1560 <400> SEQUENCE: 28

1562 gagctttcgc ccggtattcct ctgattcct gaagacgact ggcttcgttt ggtcgataaa 60
 1564 gttcattcgt acggcctaaa ggcgaaactc gactcactcg gcacgtccga ccctggaaaa 120
 1566 ctggtgaacc tgggacggaa gttcttggat gcgggtgtgg agcgtctgat gattgagtcg 180
 1568 gagggatca cagagaacgt caagtcattg aggacggacg tagtgtctaa gatcatgaag 240
 1570 gagcttcgc ctgaacgggt tatgtttgaa gcagcagatc cccaagtcta tacttggtac 300
 1572 attcgagagt ttggcatcga cgtcaatctg ctgctcagtc atagtcaaatt tgttcagctg 360
 1574 tctggtttgc gccacggcat ttggggcact gcagatacat tcggacggct tgtgtctttt 420
 1576 cgggctgagt gaggttggtg aaactgctca gttgctttaa caaaattcag tcccgcttga 480
 1578 ccttagctgc tgtaccttat aagactgagt caatgtctct gaacatgatt tcttaattgtg 540
 1580 acaagccctg atttttgcag gaattttaaag ggtgggatgg gttaggacaa attttgccta 600
 1582 gggctagggg gcttttttta ttcttaggc aaacgcctgt cgggtgggtt cacaaccggg 660
 1584 gaanccggta cccgcctcat catttcatat gaactttcaa ttogagtttt tctggttcta 720
 1586 tcgttgtaaa aacatacctc tccgcatgat tggggtgcct cacttgtaag taccactttg 780
 1588 tattcgttct tattagccct cattcatctt tatctttcct ggcaatataat atcttttgat 840
 1590 cactcctcgc ctctcacttc agcgtatctc tcgggttctg acatatgtta taatctttct 900
 1592 ttctaggata tctgcttaaa taatcttaat tattcaccct ctaatttgat tgcttttata 960
 1594 tatatactag ttatggcata ttactgtat tacacatctg taccttttct tattatctca 1020
 1596 taacttcacg attctttcgt actaatcact gtgtctacat acttcttcg caacttcat 1080
 1598 atcctcgcta ttgggtgata gttcacatat ctttatgtat cattacttta tcttt 1135

1919 <210> SEQ ID NO: 33

1920 <211> LENGTH: 1059

1921 <212> TYPE: DNA

1922 <213> ORGANISM: *Aspergillus nidulans*

1924 <223> OTHER INFORMATION: unsure at all n locations

1925 <400> SEQUENCE: 33

1927 agtaatgata tgcataactg gggtattttg gggtatttag gttgggtag aattatttgc 60
 1929 taaacccatg ggcggtttac tgttcaggta acccacccca aaatcccgcg tgggcgatc 120
 1931 agctaggcct gaaaaccgcg cccaaccgt gggttaacaa gtctactgct ggggtgccaa 180
 1933 gatattctgaa taggtatatt actgtattta gattatattt tcttacttag atagttataa 240
 1935 tatcagatatt taaatacagt attttattaa ctatgtatag cactgcttat tagagtaatg 300
 1937 atatgcataa ctgggttatt ttgggttatt taggttaggt tagaattatt tgctaaaccc 360
 1939 atgggcggtt tactgttcag gtaaccaccc ccagaaacca cgtgggcaga tcagctaggc 420
 1941 ctgaaaaccc gccccaaccc gtggttttaac aagtctaccc agcgggttgc tccgccgggc 480
 1943 ttggtgctag cctaaaatat ccaaagccca atggattatt agaaggacta acccaaccca 540
 1945 tagtttaaca agtttagtat tgaattaact aagttagctt tcaagctgac aaatacgtta 600
 1947 cacatgaaaa atcctcgttc agtcaatgcc cccctccttc tcatcaatca gacaaatcac 660
 1949 cggaaaaaga gctccaagac cttatgtcca ccccccata tcccgctact ggcacccat 720
 1951 ccaaaaaccc ctcacatgtc acaaaccgcg aataactctc cccaccctgt ccccgaccaa 780
 1953 acatttcctg gtcaccgagt atactccgta tgetcagcaa cccctcccc tcaattccca 840
 1955 gtttccattg ctgcgggtac acgcgcctg agcgtggcga catccaaatg gtgtccggag 900
 1957 ataggctcgg ctcaaacacg tcgatgggct caagcgataa tgcgctagag ttgctggcggg 960
 1959 gttggatgta aaccctcgg ctgtaaaaaa gtacaaacgt gcgggatgct ttgtagcagn 1020
 1961 ggtgttgatg tcgggggtca ggaatgtgac gaggatgag 1059

RAW SEQUENCE LISTING

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

2060 <210> SEQ ID NO: 37

2061 <211> LENGTH: 1205

2062 <212> TYPE: DNA

2063 <213> ORGANISM: Aspergillus nidulans *insit 2207*

2065 <223> OTHER INFORMATION: unsure at all n locations

OK→ 2066 <400> SEQUENCE: 37

2068 atgtattccc tcatcgagta caccgtaaag cagtaaatta aagccaatct tacctataaa 60
 2070 tctccacttc atttttgctt caagggttcg tacataactc tctaggactc ggtatctgag 120
 2072 cccctgaaaa tagccgggag caactccatc ctctatcaa cttcatctcc tacgcaggcc 180
 2074 taaagacaag ctgcgcaaga ttccgcctt gacgacctc cccagggaaa acatgtccct 240
 2076 tttagcaaacc aagcgctccc gtagatagaa ctcttaattg gaagccttct atcatcgcca 300
 2078 acttctttca aaatctcttg gagttttcct accaaggact agacactgca tttgaatgat 360
 2080 ggtgttggcg ctgaacgggc ttccacttac tgttcggcag tctgttatgg taggacgcct 420
 2082 gaaatcgccg attggtacta tcgggactgg accaggcgca aaaaccagc tcggtagatt 480
 2084 ataattatgg gacatgatac ataactggaa tacaggttct ctaagatatg acttgctgcc 540
 2086 attatcccct atccatgatc ctggctcgca ggaatgggtg cccggttcga gaccaggta 600
 2088 atctgccgta gggcagaata ttaaatggag tctcagctcc tgtaaaccaa tattgattga 660
 2090 catctagggg tgcaacttgc gcgggttggg tacaacctgc agggtttgaa atctgccgcg 720
 2092 gcgggtttgc gggttctacc gcgcagggtt aaaaaataca taaaaataca taattttcat 780
 2094 agttttcaca atattataca tctttatagt attttatgca cttttgtgaa tatatatgta 840
 2096 tttttattta tttttctacc cgcgcagtgc cgcgaaacct gcatgtattc ccctattaga 900
 2098 accccgcaac ccgcgcggac tgctaatttg caaacctca atgcactgct gtggtgtggt 960
 2100 atggtggcct gctgcagggt gcagtgcggg ttgacaatcc tattgacatc attagtaaca 1020
 2102 tagaagtgtc atgtaacgct ctttgtgtgt accaagtgtg caggataaac cactggctgg 1080
 2104 tgtcgaccag agaagacctc ctcttactaa tcaacatcca gcacctcgct cgtccaatca 1140
W--> 2106 tacgaggcaa tcacaccgcc atagcgantt gcaactatct atatactaac tgaattatct 1200
 2108 actga 1205

2405 <210> SEQ ID NO: 45

2406 <211> LENGTH: 809

2407 <212> TYPE: DNA

2408 <213> ORGANISM: Aspergillus nidulans *insit 2207*

2410 <223> OTHER INFORMATION: unsure at all n locations

OK→ 2411 <400> SEQUENCE: 45

2413 gaaacaatat agccttcagg gccggctcac taaacaaaga tgcatatata agggctaaac 60
 2415 caccatgaca tccctgtgac ctgtcctccc acatagaggg aggggggggt actgttatgg 120
 2417 gtccctttgcc tatacacgga ccttagacct tagtgactcg gccaggctt gcgctgtcct 180
 2419 gaaggttgtg agccacctat aagacttctt cacaacaaca atccttcttt ctcatcttct 240
 2421 ctttagcgat tccttcttga acgtacggca cgtttagata ggaagatcca tctaaatagc 300
 2423 tcccttaaca tatcacaagc ttagagaaag aaataaaaga tagaagtgca gatctctcc 360
 2425 tcctcccttt atcaaccttt ctgacttccc ggacctgtat gccgacggat cccttcgcg 420
 2427 aagttatgag gatggatctc cttttctaag cttcgaggcc gcaattccaa ggctgtatac 480
 2429 tgatattgca gaaaccttat ttagaactgg gttgagggca tagctggcaa ccaatcaag 540
W--> 2431 gccatagcct gtgacaatta gctcttaact gctttaaaat aattttntata tatattctat 600
 2433 attactggat aattttacta ttaattaagc agttattaag aaatataggt taatctatct 660
 2435 aagtagtcta caaaaataaa agtttatata ttactagaaa attgctatat taataaagct 720
 2437 gggaaaaaaa aataaatatt atattttaac tactaanntt agataaatat aataaattat 780
 2439 ctaactctaa gcttttctat agtataaaa 809
 2462 <210> SEQ ID NO: 47
 2463 <211> LENGTH: 6877

RAW SEQUENCE LISTING

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

2464 <212> TYPE: DNA

2465 <213> ORGANISM: Aspergillus nidulans

2467 <223> OTHER INFORMATION: unsure at all n locations

E--> 2468 <400> SEQUENCE: 47

insert
22207

2470	gggtctatca	gcagaatctg	attggtgata	tgtaaataagaa	agagggcgacc	agaaagtgtct	60
2472	atcaagacaa	atccttctgg	ttgacgcgatg	aatacttcca	gcagcaagat	cataggcatg	120
2474	tcatcgggcc	gcgcgtgggt	cagctagacc	aggttactgg	tgcatgcttg	acataggggtt	180
2476	tggggcagaa	gaagtgatcc	ttaggagtgg	cactggtttt	gccaccaact	gtaagtagac	240
2478	cgtatctaga	gtgaatgaat	ctgagattat	attcaggatt	atcctggaat	agtggatgac	300
2480	cccagccgag	gcaaaagcag	tggtgtaatg	agatactgaa	tgctgtgtta	catcttcacc	360
2482	cgtaggtagg	aggtcaggca	tcattagaac	tgtctaaatg	cctacctacc	tcccattttg	420
2484	agcgaagaat	acatagatcg	ttccgctcgg	atcagccaat	ccgggtaagg	tggttggtccg	480
2486	cgtcctcgcg	cagctgatac	cccgcacacg	atagcatgag	ttgcacacat	ggtttcgggc	540
2488	tttaatectt	caaattttca	agtcaaaata	aacgtcactg	ggttcatttt	ttgagtgtatg	600
2490	cagccacgga	agcacttctg	taccggttgc	cagaaaggct	ttggtagcgt	tcaggctaag	660
2492	cagcggcata	tatcagactc	acttaagcac	caccctgcag	ccttgctcct	cgccgacaga	720
2494	ttatccaaca	aaggagaagc	tcaacgagca	tctcgaatat	gaccataacg	tatgcacggc	780
2496	ttgtgaccgc	caatttaaat	cacctggcca	gcttggtcag	catgatgtag	acaagcataa	840
2498	tatgtgtcag	acgtgccgtc	ggtattttag	cagcccgtct	aactagaaaa	gtgtttgttt	900
2500	tatagctcaa	ctaccggtaa	ctggctgcta	acgaaatgtt	ccatagcaca	agattaccca	960
2502	tgctagaagg	gatattggct	gtcctgggtg	ctcgcgtcag	tttcccacca	attctgcaat	1020
2504	gatgttgac	ctcgaagctg	gaacatgtac	ctccggtgtt	gacctcgacg	agataaaacca	1080
2506	cctagctttt	gagtgtatc	aggcgcaaag	ttacaagtcc	tcaaatacaa	acttcaactt	1140
2508	cgaatgtcca	acctaccaa	caccatttct	gtttatgagt	ggctctctgc	agcacataga	1200
2510	aagtgcggc	tgtgaggaag	agttgggtg	cgaaggttg	cttgggacat	tccttgaatt	1260
2512	tgctaggtcg	cgcattattt	atgaaagcag	cgaatgctga	acattggcac	agtgcagaga	1320
2514	agagtgtctc	tgcttcaggg	tcattgaaat	tctcaaggat	ataaattaaag	agcatgaata	1380
2516	tatgaagcac	ctactactgc	agtagtaaaa	agctgacagc	gaacgtaaac	actctgcaca	1440
2518	cccttaaatg	taattctaag	atgcctgtaa	tgcgtctaagc	aattcgcgga	tgcatcaaac	1500
2520	aaaatgatgg	actactccaa	ctgtcacact	gtttctgacg	aagaactcag	catccctgtc	1560
2522	tttatccgag	gtccagacct	ttagtcaaga	ctacttctac	acaagaacat	aagaatcaaa	1620
2524	gcttgcattc	atgatttgcc	tgaattactc	ctcgtggatc	aaggaagggc	atttaagcac	1680
2526	agtgggtttg	attcaatatg	agacggcaag	ccatcagaac	atctaaacaa	ccattctggt	1740
2528	gcttatattc	ggaatcctaa	gcatggagaa	gagaattatg	tacatgaaga	ggtcgactgt	1800
2530	gggatgtctc	tgcgaaacga	ggcttaactt	aactcaatag	gcggtcaggg	atggcagaag	1860
2532	tcagttcatc	gtgtacaccg	gtgtacacga	tgaagctgac	caatcacacg	acgcttggtc	1920
2534	tgggcaccgc	acccagaatg	agctctgtaa	tctgtgctgg	ttagcgatca	cggcgcgtag	1980
2536	agccgtgata	caatacacgc	atgatatttc	aaagccaaca	gaaaatgcac	tttcatcttt	2040
2538	cgtgtagagg	cgtacagtct	ttctagaaat	cgcttccacc	gacaaacata	tgacagttgt	2100
2540	tgttctgccc	cactaccgag	acaattagcg	cgagcagtat	attgagccgt	cagcacttta	2160
2542	aaaggaaggc	gatagagggc	cctgtgcatt	tcctccata	cgaagcattg	ggaatacatt	2220
2544	gtcatatcgt	atacctcaac	cgtataatgt	atccacgacc	tagcatcacac	gcaacattca	2280
2546	ctttttacca	acctaaaaga	tattcattgc	aaagaaat	aatataactaa	ttgatgaact	2340
2548	acgtactgtc	aaagttttgt	acttgggatt	tctaaggctc	aaatcactac	gaaatttggt	2400
2550	gacaagtcta	aggttgtagg	cctgatcacg	agaaaaatac	aaaagctact	atttgcgcaa	2460
2552	aatgttatac	aggatatcta	tcggtaaaat	ataccgctaa	gccaaaaagc	cgtcatgact	2520
2554	tccaaattag	tcttagacag	tcatattttc	tatctcgaaa	tatctcattt	acgtgggcgt	2580
2556	tctttaagtg	gcctccgagg	gtgttcagcc	ccaatacgtg	tgctactggg	ggcgggggata	2640
2558	tttcttgaat	atgtcaggtc	ttgcattaat	tacgaaagca	gcgaatgctg	aacagtatgt	2700

RAW SEQUENCE LISTING

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

```

2560 agcacaggtc aagaccttgt tattagagat cagagaaata caggggaaac taagagcgcg 2760
2562 agtatatacc aaacatgtat tacagtgatg cagtagtaaa attatgataa ataatacaag 2820
2564 acggtgcaac tcccaagccg atctagacag gttgataatc gttcaaccac tcccgaaat 2880
2566 catcaacgaa acgccgggca actccaacta caacgccatg tttgacaaag aaatcaacat 2940
2568 ctctatcttt gttgatttgt ctgagatcga ggccattagt caacgcgatg tcgcacgctt 3000
2570 tgtcaacggtt gtctttaaga atctgggagt tcacccgtct ttgctgccaa tccgaatact 3060
2572 tccggacggc tagatcgagc ggtagatccg gaatcataat tgcacatca aggctagggt 3120
2574 ctgaataagg gagcaatggc ggtgaaccag ctggagtaat taacgtcgat gcctgagcag 3180
2576 actgcgaggc taaaagatgg atattaattg gtgccgatgg cgggtattcg tttgacgatt 3240
2578 gccttccagt tttgcgttgc ctttccaacc ggtgttgctc ttctgcatat aattgttgc 3300
2580 gaacctcatc cgggacatcg tcatgagatt caatgttcaa atttttcttc tttaccaa 3360
2582 gaacaagggt tctcaagtgg tgtgtcttga gtttgtaatg cttctttccc acggggctct 3420
2584 gccagcagtg cccgtcatgg ttatcacatg gtggcccagg acatcgcaac gcattgtaga 3480
2586 cagaccgcca aggcgagtat tgaccagagc tttgctctgc gtcaatctgg gcacccctat 3540
2588 cagcaagcat agtcttggtc actgaagtag caccgcgctt ttctccagcg cgaggcgcat 3600
2590 tataatctgc aaggtagtta acgcaaatat caagtttgat cttctttccc ttgcgtaaca 3660
2592 gattggctca ctgaaggagc tgectctcta tgacagtcca atcgatatca agacccgga 3720
2594 agtcttgata aagatcattg gccgaacgat cgttaccgac accagaatgg ttatattatc 3780
2596 taacctagcc cttcggttac gaaatattgg tcgccgcttg acatcctgaa ctttgttctc 3840
2598 caaggtttct tgccaatacg cactaggcgc tatgactata tctggttctg tgacccttac 3900
2600 ggctgggaggc tgggttgagct taactttcca gtogatcaga taagaatatt gcgcggcttc 3960
2602 gggttcccg aacggagttt ctggactggt gtcacctatc tggcttgagg aggggctacg 4020
2604 caccggaggc gtgggtgtcc gaccgaagtt gcctgcggtg ggggcgggat agagcggggt 4080
2606 tctttcccat gaatcgaaaa gctggaattg cgaaggatca tctggatagt ggggactgaa 4140
2608 gctcactgcc ttcaagtaac tgccgaggaa cctagcgtga cctcgatgt cagtctcaca 4200
2610 ttccggtgctg cacttgcac cggttaggtg gcagtaaca ggctgaggag aatgataagc 4260
2612 aggatcatga gtttatcatt caccagccag taccaacaag gacacgagcg ttcttttctg 4320
2614 gtctgagtca gaaactaggg agttggggat gtcgtgtcta cagctcaatc tgcaaccacg 4380
2616 gggatgtcca tgttgacaga ttgccagttc ctattttgca cgtgatcggt gcggaacctt 4440
2618 cgagaaaaga atggtctgat actgttactg tacgtatgga acgaaacgta atgtatcacg 4500
2620 gaaagataat attccgaaac tatctatat attgactagc gtctcttggc gcgctcaaa 4560
2622 agtgtagagg agttttttt gggttgtcaa actgattcag ccgcgcactg tatcattaaa 4620
2624 tcttctatca actactaaaa gtctgcttct tacggaactg cgacactgtt gctctgaagt 4680
2626 tagtaccac tgtagaccat atccaataaa aatcactgag atttgatcca gcagtgcgct 4740
2628 gaaggcgcta gtacctcaaa gtttgcttaa ctgaccagac gctgatgaga gcctaattga 4800
2630 tcatgcaacc atacaggaga atcattagac ttgggcactg ctgtaaacag tatttcgaag 4860
2632 ttagcagctt taaagaagct gtaacataat atatcacatc atgctttcct agttgcacgt 4920
2634 ggatgtatga tattgtcaac cggaggtctc tcttaccag tactaatcaa cagccagcac 4980
2636 ctctcatttc tttattcatt tgcattctg tttgcttgtt tgtttgatgc attacaccgt 5040
2638 ttgtatgtct gagctatctc ctactcatcg agaaccttct tctgaagccc ctgagagcta 5100
2640 taaattatcc atacaaactg taattagaat gatcaagacc ttcaataact tcgttcgcag 5160
2642 cagaccttag tcccatgacc agaatcgagc ctgacagcca cctcgaatgc tcacatattt 5220
2644 tattattccc tagatttgac tctgcttggc ttgcaacgct ctatctacag cttaaatgaa 5280
2646 cctttggatt caccaacttc aacatgtcta attatgaacc caatgatgaa ggcccatccc 5340
2648 aaagctcgct tgtcggccaa gccagacaga taactctgca agtgggggag tctcgatttg 5400
2650 ttacagctta tgaacactt gtaactgaga gcattttctt cgcatccctg ctgtctgggc 5460
2652 gatgggacaa tgctcttccc gacgggtctt attttattga tgcagatcct actctgttgc 5520
2654 agcacatcct gcgttatctc aggcattggg tgctctgat attttatagt atcaacaaag 5580
2656 gtcatgacca cgcattatat cttgcccttc ttaaggaggc aagatacttt caaattgctc 5640

```

RAW SEQUENCE LISTING

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

```

2658 ggctccaaga ctggcttgaa aataagcaat acctccatgt gctagctgtg gagtgttcag 5700
2660 ttaaagaagt aaagggacta gtaatctttc tacaacactg cccacagaca cagcagttgt 5760
2662 gcacgacccc agataggaaa tcagaaaggt gtatatatgc cctcggggga taggctgtca 5820
2664 ccgtggacaa cccaataact gtggtataaa atgcatgaag gcacaaggta ataaggatgc 5880
2666 tgcttatgag gaggaaccag cttttaggta tctggtgtgt aaaaaacgaa ttgtcctaaa 5940
2668 tatacaagac tgtgtggtta gtcaggaagg gctacactact gttacagatg gttgacctct 6000
2670 caagcctccc taacccaggg gaactctgtc gtgagcttgc aatcttgatt aacttaccas 6060
2672 atctctctct tgacaaccac atccaaccag tgtgatgtaa tgggcgaaaa gtctgctctt 6120
2674 gatcagctgc aagaatgtat caaatagaga tattagaaca aactctctgt attgcttgtt 6180
2676 aattagaagg gcgtagcaga ctagactgat attataagca aatacgtcag gcgaccatag 6240
2678 attgacaaat ggatatgtcg gacttattac caaggagcat tccgcgcaag atatcgctt 6300
2680 ccagaagagc ctggcagtaa ccagtgtctg ttttattact cataatataa gacaaagtga 6360
2682 attgcggccc aagatagaca gagcattcgc ccactactact ctgtgcataa gttccctcca 6420
2684 gcctaaaaga aacaccttta agttgggtat ttacagcaga tttcggcatc ttgactgtct 6480
2686 caggcatcag gcccaggcct gccgcactcta gtgggccag aatggtttgt atactggtta 6540
2688 ttatgtgctc caattccttc agtctagtgc agatatgttc cagataccca cgtgcaacag 6600
2690 acacacgcct atcatttggc cctatatattg cgcgactgct gattcgcaac ttctggaagg 6660
W--> 2692 tcaagaaata ccggatgggc ccgcaccctt gctgtgcgct ttcacnecgac gtatttcggg 6720
2694 agagccatcc ttatggggcg tgggctgtc ggcgatagct ggctcttcgg gatgttcgac 6780
2696 aggtaagtgc tttctgtatc acctctcgat aagccttctt aaagatatta tgaggaatag 6840
2698 cttcatgcac tcatttttga gccgaaatga ctgtcac 6877
2777 <210> SEQ ID NO: 51
2778 <211> LENGTH: 404
2779 <212> TYPE: DNA
2780 <213> ORGANISM: Aspergillus nidulans insert 2207
2782 <223> OTHER INFORMATION: unsure at all n locations
E--> 2783 <400> SEQUENCE: 51
2785 atcaccaact ccgcgcaacg ggtctcccga gtcattggcca gactcaggtt tgtacgccaa 60
2787 aagcttccgg gaatatccca aggaacaatc cgttgcatga caggccaggc gaatggtgct 120
2789 aacctcgatc ctactggaaa cgaacagtga gccttgcgtc ttcaatgcct gcccgataaa 180
2791 caaatcaatt tctcctcttt acctgaggcc ttcttgtctc gcgttggaagt cggcaatcga 240
W--> 2793 ctgactgacg taaaacaacg gtcccagggg accnctgaac tgattcgtcc cttctgttca 300
2795 gaagacgcgt ggtctgaccg cgatccccca gggtgcggat aacactgtca gtcacgttta 360
2797 gtaaacgacg tagcgtggac tgaaggttta acaagctgga ttga 404
2700 <210> SEQ ID NO: 80
2701 <211> LENGTH: 3496
2702 <212> TYPE: DNA
2703 <213> ORGANISM: Aspergillus nidulans insert 2207
2705 <223> OTHER INFORMATION: unsure at all n locations
E--> 2706 <400> SEQUENCE: 80
2708 agacgatctc agcccgtctg cctaaaactc gcggtggcct gactagggtta ttatttaggg 60
2710 ctttcgtcgt gccactgcc cagcgcccag tgggtgcgtc gttaggtacac tcgagctccc 120
2712 ccaagccgct ccgctgcag taagatggct atagcgctc tttcttctt ggtcgcacgc 180
2714 tagcagaccg cacacgtcat cccttgtatt gtcattgggg ttctcggaga attattcttt 240
2716 tattttttta ttttttctt cttccctatt tttttggtt ggtacaatac tgctagact 300
2718 acggtcaaca tctggggtcg atcctgagga aggacacagc catgaaattg tcagggatcg 360
2720 tcatcgtgcg ccaatcacgt ccaggccttt caggcaagcc tatgccctat agagcataag 420
2722 gagtacagtc cgaatgccga aattcgccca aaagttctca cagagcctct agcgccaatg 480
2724 ctaggcgcct cgtagcagc gagctcgaga tccccatcct ctttctctca tctggttacc 540

```

RAW SEQUENCE LISTING

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

```

7726 ttccgtgcc ttggcgcccta gcaggcgcac ttgattttgc aacagcacag ccagggatgg 600
7728 gccaggagg ggagtcgggg gctgcgttc tagcggcgaa tacgaagtac ttgagagcac 660
7730 cgtttccctg ttgateccatc ctgtccgact tttttctctt gcgggacagc cgtcggactc 720
7732 gggtgacag gatgttatta cctcgacatt tccggcgact agtcgccgtt gcgatcatgc 780
7734 tcacaatcct catcaactgg catctactgc ggaagacaca tggaccggct gtggctgatg 840
7736 cgcgggcgca atatccacgg atcgcaaaagt acatagaggg tgggaagggg agcggcggtg 900
7738 gtgagtcctc tgtcggatct cttgtttctc ttgagaagca gcgtggctga cctactctca 960
7740 tgcaatagcc tggcatctcc cgtcaacatg gactgaaacc ccgaacacgc ccgtcaacga 1020
7742 tgtcgtcgca gcggcgcaac tggctctaaa ccgctcgagc aacgaccctt ccggccacct 1080
7744 tccgcactcc aacatccccc ggatcatcca tcaaacatgg agagatacca ggttcgagaa 1140
7746 atggcgacca aagtaccagg cgagcgtgga gaaatggctg cgcggtggtc aagaggagga 1200
7748 tatcccgtag ctattttggg atgatgccgg agtcgctcaa ttcatgcgaa cctttgagcc 1260
7750 gaatcttgag gcggaattct acggcctgcc gactcgggtt gagcgtctgg atgtatttcg 1320
7752 cgtgctgggt tgcaagtgga tcgggtggtg tgtaagccct ccagctctct ttgccttttt 1380
7754 tctctgactt gctgacaagc tgcattctga gtacgttgac atggacaccg agcccatccg 1440
7756 gtgcctactt gaatggatca tgcccaccga cctaattccc tggaccgacc agaagacaag 1500
7758 caaactttat cactctacgc aagctgtcaa cgccatcgtc ggcatcgaag cagacacaaa 1560
7760 ccctgacact gacacctact ggcgcatggg ctacttcttc cccatccaac tcacccagt 1620
7762 ggcattegca ttgcgcgcgc accaccccg cctacaaatc ttcatcgacc ggcttcacga 1680
7764 gaccatccga ctcgtcacaa gggatcagca gctgctgccc gaatccgagc agagcgccgc 1740
7766 ggcctggact gggtcgaccc tgtgaacctg accggcccga ttgcattcac cgacagtgtg 1800
7768 cgacagatc tgggcccggaa ggtgatctg cgttggaacg cgctcaccgg actgcatgac 1860
7770 gacggtgaaga caaagctggt cgaggacgtg cttgtccttc cgatcaccgg cttcagccct 1920
7772 ggcagcgcg cttccgtaa tatgggtcg aagcctgtca ctgatccctc ggcacgactc 1980
7774 taccatcacg ccgagggttc gtggcgcat tggagtctga gactcgagat gggcaagttt 2040
7776 tgccgcacag cgtttgggct ctgtaaagac tggtcgaagg tgtcgaatgg ggacggttgg 2100
7778 attttctgat gcgatgtgat atgcgctttt acgacctcta tacccttgat gtttgtttat 2160
7780 attaggacga tatttaatac tgtatagacg ctcgatgcac gaatgaatag aatgacttct 2220
7782 acctgcagct ccaggctcgt agcctttgct caaactttca agagccggag gcgccagtcg 2280
7784 ggacacctgc cgcaagctcc ttgactcttc caggcttatg atggacgagg ctataaacgg 2340
7786 ccccatgta gcatcgctac gcgccagcag ctatacgcaa ccgctggtgc gactaaccag 2400
7788 tatgtagaaa gttgctgcct tcatgggagc ggcacatggc ttactgtaag gctccaacag 2460
7790 cgacatttg ctggtctgga ctctgatggg aactcaaggc atggtcata tcccaattta 2520
7792 agcttacagt acgtagaaac cttgctcgta tcagctaacc aatactgagc aaatcttatg 2580
7794 gatctgtctc gaccgggccc tggtaactcg taactgggag ctaagctcag cacaatgacg 2640
7796 aaatttgatc cacctgtttg ccagataccg gcgcgtccc aagaagaaat atcaagccag 2700
7798 cagagcgact gctggggctg ttgctaagct agtccactgg tccattcaa gggaaagccg 2760
7800 tgggaatcag gcaacggtgc gactactcga cgctttccaa caacgcctga ctgaacggac 2820
7802 ggaatttttg ttgccaaact gttgtgatgg catgggatag agtctgtcaa cttgtctggt 2880
7804 ttggttacca gaaagacatc caacagcccc tcacaatcgt gccatctcat ctgtcttaca 2940
7806 gattcccaat ccaacgaagc ttggtatttc ggtagagagc tcccaacgac ggatacattt 3000
7808 tgcaaggcac tctgctcttc cgtcctgcga cacatctgtt ccttgattcc tcccctatgt 3060
7810 tcactttcat cgttgacttg agccatgcat gattcttagg tacatgcctc agggtaaaat 3120
7812 cagcagaggt tgcattagag tattcttccc gtaacattcc caatcccgca ctgcagacta 3180
7814 tctaccatg cacagtactt tacctaggag ctgttctact acatagatgt cagagcccg 3240
7816 gctgtgtgag aatgctggga ccaacagacc actgcaaagt agagcacatc ctgctttcaa 3300
7818 agagaacggg caaagtatgc tcagcgggac cctcagcagg ctcgctgtgg gctcctgttc 3360
7820 gacccaatca acaagcgaat atcaatacgg aatgccatag ttcatcatag ttcatcatag 3420
W--> 7822 tccataataa cttgattgac tctcatgagc gtgtcngatt ngcagcttcc aacgtattta 3480

```


RAW SEQUENCE LISTING

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

```

7824 gggtcatccct tataac 3496
8081 <210> SEQ ID NO: 84
8082 <211> LENGTH: 674
8083 <212> TYPE: DNA
8084 <213> ORGANISM: Aspergillus nidulans msl 2207
8086 <223> OTHER INFORMATION: unsure at all n locations
E--> 8087 <400> SEQUENCE: 84
8089 gaataaccct actaaaggga tcaggccggt gagcacttcg gatacctgga tatagtctca 60
8091 tctaaccgcg gaattgtctc gtccgggcat gtcaaggacg ttacgccaga tgtatgcgtc 120
8093 ccatctcctt acgaaagtcc tgtagagctc tgacctcagc aggaattcga ccgagtattt 180
8095 cgggtcaaca cgcgcggaca gtttttcgtc gcccgcgagg cgtatcgcca tctgcgtgaa 240
8097 ggcggacgca tcatcctcac aagttccaac acagccagcg tcaaaggcgt ccccgaggac 300
8099 gctgtgtact cgggctctaa gggggcgatt gacacctttg tgcggtgcct agctatcgac 360
8101 tgcggcgaca agaagatcac ggtcaacgcg gtccgtcccg gcgccatcaa gaccgatatg 420
8103 tttctatccg tgtcgcgaga gtatatcccc aatggggaga cttttactga tgagcaggtg 480
8105 gatgaggtac gtttgtcttt gtgtctagta tctacggcgg ctgctaactg gacagtgtgc 540
8107 cgcgtggctg tcgccgctaa atcgggtcgg attaccggtt gacgtggccc cggttgctag 600
W--> 8109 cttttctagct tcagatgcng ccgnattgat cagtggaaag attattggcg ttgatggggg 660
8111 gccttttagat aagc 674
9218 <210> SEQ ID NO: 108
9219 <211> LENGTH: 1395
9220 <212> TYPE: DNA
9221 <213> ORGANISM: Aspergillus nidulans msl 2207
9223 <223> OTHER INFORMATION: unsure at all n locations
E--> 9224 <400> SEQUENCE: 108
9226 gacgcatgag tccagctgat ctccgatgca atacaacgcc cgtcctatctt gtttctatca 60
9228 tgggtctgagg gggctcgagcc tatgacgtga atgataggaa ctatgaatag atctagattc 120
9230 ccgacatggc cagaatccat gctgcgttga cgccactcgg gatctctatc gcaaaactata 180
W--> 9232 gcgcacanat catggacgta ctcagggttc ggggtctcgcg atcagctacc gagccgaaat 240
9234 ctgaagcaag ttgaattgat aagatccctc ggaatgagaa gcctagtgcg cggaagatgt 300
9236 acctggtctt taccgaatca agaccgattt cccggatgag gccgctgtta ctttcgtagc 360
9238 catttcaaga gacaccagac agggagccgt acataccgcg tgtgaaacta ccttagcaga 420
9240 cggtgcaaag tcatatcaga tgtatgacat gcatgaatta ttccctattc taccctagtt 480
9242 ccgctactat ttgctactac caccggcaaa ctgggacgcg ataggtgttc tacctctcag 540
9244 gctgaggttc acgcctctct ccgccggaaa gaaaattgtg taaaggcggg tatatacgat 600
9246 ttcattcttg cctgcgccgc acttccacat attcaggggt ctttgaagggt tagaccggtg 660
9248 aagttttccg atgaggcggg tgtggaaggg cgtgagttag ggtttgcttt cgtgatggca 720
9250 ttcaaaagcg aaacgcactg ttggttccaa tcttggaaagc atatccctta caggggttcc 780
9252 tgacaaattg gaggcgtgca gccgtttcct gaagctggta gcgtcgcggc actgcctgtc 840
9254 agacaaccgc aaaatcgttt atctccatca aaccttgccg ttggccaaga ttagaccccc 900
9256 gttacggcgg ccttcatcag tagggtaaaa ctaaccgatc tcacgattat ccaagccttg 960
9258 ctcacgtttc ccttttagtg caatcaaacg cttgccgttg gtgcaggtag ccggaagacc 1020
9260 cctcaattgc gtcccgctctc tatcctctgc cagaatcgag ttccctggta gattcctttc 1080
9262 acctctgtct aatgcctgca ctgaacgaac tttgaatttt tagttagggt acgtagatga 1140
9264 tccggcgaagg atagcccgctc cgaggacgaa taaccatgct tcttggttcc taaccatata 1200
9266 tccataccat tcgatgctgg tcaagagagc attgtaactc tctgtctcta tgetatatac 1260
9268 cgaaaaggcc aacgcgcatt ctacgtacc aagctaaacc aaacctaaaa tttatataat 1320
9270 gtccatgttg ttcaactgact gggtttgctg atcactaata ctcgaaagtc ggtgccagca 1380
9272 ttcttctat gacgt 1395

```

RAW SEQUENCE LISTING

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

9715 <210> SEQ ID NO: 117

9716 <211> LENGTH: 880

9717 <212> TYPE: DNA

9718 <213> ORGANISM: Aspergillus nidulans *insult 2207*

9720 <223> OTHER INFORMATION: unsure at all n locations

E--> 9721 <400> SEQUENCE: 117

```

9723 acaactagaa atccattgat tgcttgatca caatataggc agaggtcatt tttctggcgg 60
9725 taagaacggc gggatgcgga cgaggttgaa gaagcagata atgaaggatga aacagatcag 120
9727 gctgactgga caggttggaac agcagaaatc ctgataggat ctatgtccat ttggtctata 180
9729 ttatggttca ggggttggtg ggatttgga gctggtttct gggcgggccc gtagcaccgg 240
9731 tcggcgcgct gaacaagttc aatatattca ttatatgaga ggtcaaagat agagtcgttc 300
9733 aaactttcca atatctggtg gagattgggc cggagccccc gatggagcgt ggacacacac 360
9735 aaaatatctg gccatgagtt tgtattggcc tcgtacaaga gcctttcaaa acgagcaagg 420
9737 taagccacaa gcaattcatc atccctttaa gagatagtgg agaatcgctg tatggcttct 480
9739 tgggtgtccc gtgggttggtg acagaggcat tggaagaagg agaagataac ctcaggatcc 540
9741 tattgttggt tatcttctgc agactggcag aggtgtagga ccgaagcctg ctatggctgt 600
9743 tctaattagt cctatacata gtcaaaggca tcagctctgg tgagctgac agatcagagt 660
9745 tttgctctga tagatggaag ccatgtacaa ggtatgtata gtttgccatt gaagcaaggc 720

```

```

W--> 9747 aggtcaggta gatgggctct ggggtgctgn gcagtctgga gctgggtaca agctgttgat 780
9749 ctcagtacag agggatcaag gtctatcaag ttgctgaatt caagcattgc tctggagctg 840
9751 ttgaagtcac atgtggctct gagttcttgc tgagctgctg 880

```

9826 <210> SEQ ID NO: 120

9827 <211> LENGTH: 233

9828 <212> TYPE: DNA

9829 <213> ORGANISM: Aspergillus nidulans *insult 2207*

9831 <223> OTHER INFORMATION: unsure at all n locations

E--> 9832 <400> SEQUENCE: 120

```

9834 atggtgatta taagttctcg cgaaggcgaa acgagatgga cagcattgca aattactgct 60
W--> 9836 ataagggatc gctancaccg aacgcacaat agtgtgtcgt acaggctgcg cgaccatgag 120
9838 tgttgccctc gatgtgtcaa ctogtagtct ctattttggc cagcgcgca agtagtatgt 180
9840 catgcatagg atggtgctgc agacaaccta tgtatcttgg ccggacaatg tag 233

```

10075 <210> SEQ ID NO: 129

10076 <211> LENGTH: 710

10077 <212> TYPE: DNA

10078 <213> ORGANISM: Aspergillus nidulans *insult 2207*

10080 <223> OTHER INFORMATION: unsure at all n locations

E--> 10081 <400> SEQUENCE: 129

```

10083 tggccatggc tgaagtcaca gagtccttcc aggggcgtcc ggtcctgac aagcacaaat 60
10085 cgtttgcgtt ctccaccg gctgcattct gtatagcga gattgccga gacatacctg 120
10087 ttcttatttt tcaagtcacc atctttgctc tccctgtgta ctcatggtc ggccttgaga 180
10089 tggatgcggg tgtgttcttc acgtattgga ttctggtatt tgcgacaaca atggtaggtc 240
10091 aacttacgct atgtcattat tccgcatgt taacgtccgg caggcgatga ctgctgtctt 300
10093 ccgagcttgt ggtgccgctt tcaagacgtt cgatgacga tccaaggttt cgggtttcct 360
10095 tatctcagct ctcatcatgt acactggta catgatcga aagccggaa tgcaccctg 420
10097 gtttgtttgg atctactgga ttgacctct ggcgtacgc ttcgacgctt tgctatctaa 480
10099 cgagttttcac ggtaagatca ttccctgctt gggcaccac cttgtgccg ccggaccagg 540
10101 atacgaaaat gccactactc agtcgtgtac tggcgttgga ggttccatcc ccggtcgga 600
W--> 10103 ttatgtcacc ggtgatgact accttcgcaa ttctttcgga taggcacggc cacctntggc 660
10105 gtactttcgg attcttttgg cttgggggct ctatttggtg ggtggcacta 710

```

RAW SEQUENCE LISTING

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

10590 <210> SEQ ID NO: 141

10591 <211> LENGTH: 171

10592 <212> TYPE: DNA

10593 <213> ORGANISM: Aspergillus nidulans

10595 <223> OTHER INFORMATION: unsure at all n locations

E--> 10596 <400> SEQUENCE: 141

W--> 10598 agtagccagc ggtgtcaaga atctgaatac cgeccnnnnn nnnnnnnnnn nnnnnnnnnn 60

10600 nnnnnnnnnn nnnnnnnnnn nnnnnnnctg cagcaacgga atggttgctg aaattattac 120

10602 tatagatcga gccagcacgc caggcaccgc cgctaagcca gacaagtacg t 171

10785 <210> SEQ ID NO: 144

10786 <211> LENGTH: 1485

10787 <212> TYPE: DNA

10788 <213> ORGANISM: Aspergillus nidulans

10790 <223> OTHER INFORMATION: unsure at all n locations

E--> 10791 <400> SEQUENCE: 144

10793 ggaaagcatc atcttggtcg atagtgggtg aggatattatt ctaccccgta attttttcta 60

10795 taagcctatc acgttaacac ctcttaccac cctgtcactt cggccaagtc cactctccat 120

10797 ccgttttctg cgccgttgaa gcttgaagag ggtgatggct gcacgcagca ctgtctttat 180

10799 acctggccat tgcatttctg tctttactat ccaaaatttc ctgcgcgtat ctcccagaat 240

10801 tacaggccct gcttctaaac agatagtctc agccgtgaca gctggtccta tccgttgtct 300

10803 gagaaatacg ggccagggtg cctccgcgcg attttatatg gcaatccaag cactaaacga 360

10805 ttcgatgcaa ttgatgaaac tcctcgca gaacctacac caacgtcgag gtgatataac 420

10807 tgcccggtgca ggtagcgcat tagggctttg tacatgtac gcgcaacgca aaactcaaat 480

10809 catgttttta cgccgtgagac catcggtata gtgttatctt cttaaaggac gtacctacca 540

10811 gcgtttctga caactatttt attatagcgg taactttgca gatatagtct ttatgaagg 600

10813 ttctgcaaag tatgagccgt caatttcgcc aggatattctt gggccactgg ggggtgagatt 660

10815 gttggccacg tgatataaat ggccgtatct ccaaccctcg acgaactgac cctcaatat 720

10817 accgtattga gagacacaga agaagagatt tatcgccaac gagatagata gtcaatcgct 780

10819 atatggcatc cgctccttag caagctacat ccgtgtagtt gatacagttt ccttctgccc 840

10821 ttcccccctt gagcgatcat gcgtatctac aacaatgcga ttattacca aaacaagtca 900

10823 ggtccaaata ggcccttaaaa cgccgcagtt catctaattg agcaatggaa ctaggggtcc 960

10825 tcgaagcggg ctgcggtgct ccgtaacgc ctgagtccaa tccccgcccg ccccgctca 1020

10827 aatcactcct ataactctca aaattttcca cgtacctggg aatctctcag atttttccaa 1080

10829 ttggcgctcc gccaccgct cacttttctt tccaggcgaa aagacagcta gcatgtcatc 1140

10831 tgaaaccatc cctcagaagc agaagcacc ccaaggacag ggcgccaaga gctcccgatg 1200

10833 gcgtaacgcg cttggcaggg actgggcttt ggtatccctt ttcaccggt taatgaccgc 1260

10835 agtaatcggg ttggtgcttg gaatcctgaa tgcagaaatg gcgttggaag cgccttttgg 1320

10837 atttttccag cgtatcgata tagacagcca ttgggaggag caccgaaaag aggtgaaaga 1380

W--> 10839 caotttcatg gccagctggc agcctaagc caaacatgcc tggggtaaga ngatcatcag 1440

10841 cttcaaattc ggcttctttt ctatttttat tattattttg tggtt 1485

11004 <210> SEQ ID NO: 149

11005 <211> LENGTH: 608

11006 <212> TYPE: DNA

11007 <213> ORGANISM: Aspergillus nidulans

11009 <223> OTHER INFORMATION: unsure at all n locations

E--> 11010 <400> SEQUENCE: 149

11012 ctagaactaa gaactaggga tcaattacag gaagattcgg acaaagaata gatggctaac 60

11014 tacgatctat gccaaactatt tcgaggctaa aggagtgtaa tcaaagaaac gaatagggtc 120

11016 aactatggct gctatggccc caggggtggg aagaatcagg caagccctag atcacctgca 180

RAW SEQUENCE LISTING

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

```

11018 cgtccaccca gaagcgggtg tcgtcagact gatatttoga atcactctca atctgtctgt 240
11020 gagtccatgc catagcgtcg atgtatcctc tagaagaata tcagtgaaga ccccccaaaa 300
W--> 11022 tcacaatcgt tggatggcga gatactcgcc cttgatgtcc tcgggtgagg ngattgttca 360
11024 caccagactc gcatttgcgg tggccgctga accagatctc atatcaaat ggttttcacc 420
11026 ttcgtagcga gcttgaatat ccttggccaa gtcggagctt gcatccatcg ggtcaataga 480
11028 gagacagagg ccggcgagct tgacccggaa gaagagccct tatttgagaa tggagccggt 540
11030 atcgccctgg tcgatgggcc tgcctagaca ctttgacgcc caatgaccca gaatgaacaa 600
11032 ttctggtt 608
11279 <210> SEQ ID NO: 154
11280 <211> LENGTH: 2081
11281 <212> TYPE: DNA
11282 <213> ORGANISM: Aspergillus nidulans insert <2207
11284 <223> OTHER INFORMATION: unsure at all n locations
E--> 11285 <400> SEQUENCE: 154
11287 tgccctcgat actcgaaaga gtaacatgtc ggtgtgcagc agcggcgaga gaacccaacc 60
11289 gttcctcttt tgatacatgt ctcccagttg aggatacagg taaccaggta atcaacaact 120
11291 tggatgatac tgcctgatgg cctcgtgaag ctgcacaggg ccgccgttgg acataaaaaag 180
11293 atcaatatcc cgcagttgag ggatcttatg aatgaggtca cttaccctgg cgttgaggtt 240
11295 cgttgaacaa cctcgcactt tgggagtgtc tgaactccc aagttctcag cttgaagcgc 300
11297 agaccggagg ccgctgtagg cacgaagcac tgggtgcgct cgtgggcccgc taatcggata 360
11299 ccattgggagc atgatactga gtcgttttgc gtgaacgagc acacggctgg cttctggctg 420
11301 ccggagaaac ttaagaggca ttatccttga gtctacgtat gatgatatgc tcgtacaaga 480
11303 gcgacctggt aacctgttt caetcttggc ccacctcatc acgtatctgc agacacggta 540
11305 agatatacca ccattgaaaa aggggttaacg tacttgtctc ggaatcagac atttaaacctc 600
11307 tgatggcagt ccgtccatgt tttggtagag ggggttgatg gtgtgcggag ggttttaaaa 660
11309 gaaatgctag cttggggaac atggctttct ttataatca ttctaccag agcttaccta 720
11311 acagcacaga atagcctact tctgcctag cggaaaacat atctagacct agatagatct 780
11313 cctgctctga tctccccct ctagccgcac ctaaaaccaa caacacctta gacatcagtc 840
11315 tccccacact aattcttga gaaactgacg atctcgtgtg tcccccttc cgcacgtac 900
11317 ggtgggagcc cgtaaacgtg ccagttttc tcaactgcaga gtggcttct ccaatttggc 960
11319 aggtagttat tgaggcagct cagcctcccg aaattgactt tctccttga gagtatctgt 1020
11321 tatgaatgct caaaggggaa agggtagaag gaagctgcat caactacacg aacgtagcct 1080
11323 actaaggata ggatgccata agacgattga ttctctatct tgatgacgat agttctcact 1140
11325 tcttcaatgt acaactctc gagggatcag gccaggggcc agagatcatg ccatacagat 1200
11327 cagtgggcac gtgacacgag gctcaacatg atatatcgt atcagtatcc tatgtgataa 1260
11329 gtctgttctt cctcgtccaa aaatcaccaa cagtattaat cgataaatga tgtgctcggt 1320
11331 agtatgtag atataaacc tcacttctat aactatagat ttgggataca ggtacagaac 1380
11333 catgtcttgc tatgtaggtt cataagccag tgtcataact taattcaatt ttcttgccaa 1440
11335 gagactgaca aacattgtgt atcattgctt cttttaagta cggcactatg ttcgaacaaa 1500
11337 agggcaaaaa cgtatttaac acgtaacgag tttgtaccag ctgagattct gccagcagaa 1560
11339 atttgattac atatgcagga tagcttgctt agtttcaccg actggttact cctcctaagc 1620
11341 accacgtaaa ggtgcaagct atgctcaggt gaggtacaca gcccgtaacc ctaggcagtg 1680
11343 ctggtgttcg tacaggaaaa tcaagaaagc tcgtacggac cttataagac aatcggattg 1740
11345 tctcctatccc cttcagggaa atcaaggtag ataggatttt cagcctcacc ttccactgga 1800
11347 tcaaggatga taaccagctg gtttgagcc cctggggta gaccaagcc atcaccagc 1860
11349 ataccctgcc atgctcgtc tcgtacggag cagcaatgcc catggtcacg ccatttataa 1920
11351 ttggcgagc atccgttgaa tgccccagc acatggcgcc attcagggaa gactggtctt 1980
11353 tcttgacgga gcggcatcct ttacagggtt ggtcagacga gtccccaga ctgtatagca 2040
W--> 11355 ttgcattgat gtonangggc cgggtgttga taattgatgc a 2081

```

RAW SEQUENCE LISTING

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

11958 <210> SEQ ID NO: 166

11959 <211> LENGTH: 173

11960 <212> TYPE: DNA

11961 <213> ORGANISM: Aspergillus nidulans

11963 <223> OTHER INFORMATION: unsure at all n locations

E--> 11964 <400> SEQUENCE: 166

11966 taaagggatc tagaatcgtg attatgagtt tgataagggg aagcacatgg aatacattgg 60

W--> 11968 aaattagtgc tataaggcat cgctangaca gaaggcagaa tactgtgttg tataggttcc 120

11970 gagagaatga ctgttgagtc gatgtgttca ttagtggttt ccattttagt cag 173

13005 <210> SEQ ID NO: 177

13006 <211> LENGTH: 712

13007 <212> TYPE: DNA

13008 <213> ORGANISM: Aspergillus nidulans

13010 <223> OTHER INFORMATION: unsure at all n locations

E--> 13011 <400> SEQUENCE: 177

13013 cctcggacaa caaggtctac ttccagctgc accagaacgg ctccctcgaca gttaaacacgg 60

13015 gcccgaatgg attggagcgt ctcgactaca tcatctctgg ggccgagaag cgcggaatca 120

13017 agtttggtcat ccggttggtt aactactggg acgactttgg tggcatgaat gcctacatca 180

13019 ggcctatgg cgccgacaag ccggttggtt acaccaatga taagattcag gctgcataac 240

13021 acgcctacgt caaggccgtg gtgagccgct atgttgactc ccggcaatct ttgcctggga 300

13023 gttggcaaat gagccccgct gcagtgggtg cgacacgtcc atcatcaatc agtggcgac 360

13025 gaaaaccagc agcttcatta aatccctgga tccaaaccat atggtagcca tgggcgacgg 420

13027 tgagtccctt gaatctccct ctctctggtc gtagaccgcc gctaagaggg gatctctctt 480

13029 agagggcagtg ggcctccctg gtgacagcaa ctatccctac tctactacg aaggcaacga 540

13031 ctttgactg aaccttgcca tcccgacat tgactttggc actctccatc tctacaccac 600

W--> 13033 cgactgtacg tatctnccgg atgaccaggt tctgcgttct ctctccatat cgggtgctaa 660

13035 tgacttccag ggggctgag caacaactcg tggggcaaca agtgggtaca ag 712

13632 <210> SEQ ID NO: 183

13633 <211> LENGTH: 1245

13634 <212> TYPE: DNA

13635 <213> ORGANISM: Aspergillus nidulans

13637 <223> OTHER INFORMATION: unsure at all n locations

E--> 13638 <400> SEQUENCE: 183

13640 atgataagca cagcgtatcc cgtttggggt aacgacggcg agggaaatagc accggacttt 60

13642 ataacatcgc tgtcaaaagc tccgacctct cattgagtat ccgtagtgtg tctgcctcaa 120

13644 agaaatagaa aagatttggg tgaccgtaag acaaacacac ggaatggcac aagcaaggcc 180

13646 agcagagtgc tctggaccga cagtgggagt gtcaagacag ggcgagacgc agcgtatgga 240

13648 atgatcgttc ctagtgttcc ctgtaagaaa catcgaagtg gggtagtcca ttgcactaca 300

13650 agtataacga tcttgagtgg ctgaacggag gaaaacgggc agaaccgctt cagtaacagc 360

13652 tgagcctcgt gagtggcga atctgcactt taatttttc tcagcacagt gacagtttct 420

13654 ggttgggcca gctggcgctt cttaagtaga ggggtccgtg gctccataga tcagactgcc 480

13656 tccgggataa aaggtcacat ctcccttcaa gcagtcaatg tacttacggg aaacatggaa 540

13658 acatgagtca acttgacaga gtgggcatag ctttgttatc tccgttgtag gtcgggcaat 600

13660 tggttaagctc acttctttgt cgagtactga atatacccat atttcaaga gaattatggt 660

13662 tgtgctgttc gtgagttgtc gtaggtgtgc cgattgtaca tcaagaccgg tgcttgggat 720

13664 tgcggaatc cttgctgtgc ccggttaagat gccagcgtct ggtatctccc tggtaacagg 780

13666 ctcttgggca acttaagacc tattttcaat catgaaatca gcgttcattg agtgagtgt 840

13668 gagtgtattc gaagaagtat acttgccgac ggttggaaaa acaggaacgc tggttccaca 900

13670 ccaaattggt gaccgcccac cattccctac tcggaagagg aatcacgagt ctgctgatgt 960

IMPORTANT
The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

IMPORTANT

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/404,520A

DATE: 01/07/2004

TIME: 12:07:42

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

```

13672 catcggttcc acgtgatgca cgcgcggtct tgagcttccc caagctgggt actgggagaa 1020
13674 gcttcagggtt tcagcattaa gggctcttggt caatgtcact gacgcccgggt tagcgtccta 1080
W--> 13676 tcaatctcaa tctagctttc agcgtcttnt caagtccatc gccggctcctg ttccggatca 1140
13678 ccategctat ctncctgtct atcacgggtt tccggcgctc caccgagctt tcgctcctta 1200
13680 gccgcctctg tccctccttc agctcagttt ctgtctgacc tagcg 1245

```

Important The types of errors shown exist throughout
the Sequence Listing. Please check subsequent
sequences for similar errors.

t
ent

09/404,520A 14

<210> 44347 *last sequence in submitted file*
<211> 21
<212> DNA
<213> Aspergillus nidulans

<400> 44347

gttctcgaga cgagcgatcg c

21

VARIABLE LOCATION SUMMARY
PATENT APPLICATION: US/09/404,520A

DATE: 01/07/2004
TIME: 12:08:40

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt
Output Set: N:\CRF4\01072004\I404520A.raw

Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:24; N Pos. 211
Seq#:28; N Pos. 664
Seq#:33; N Pos. 1020
Seq#:37; N Pos. 1168
Seq#:45; N Pos. 586,757,758
Seq#:47; N Pos. 6706
Seq#:51; N Pos. 274
Seq#:80; N Pos. 3456,3461
Seq#:84; N Pos. 619,624
Seq#:108; N Pos. 188
Seq#:117; N Pos. 750
Seq#:120; N Pos. 75
Seq#:129; N Pos. 656
Seq#:141; N Pos. 36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54
Seq#:141; N Pos. 55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73
Seq#:141; N Pos. 74,75,76,77,78,79,80,81,82,83,84,85,86,87
Seq#:144; N Pos. 1431
Seq#:149; N Pos. 351
Seq#:154; N Pos. 2054,2056
Seq#:166; N Pos. 86
Seq#:177; N Pos. 616
Seq#:183; N Pos. 1109,1153
Seq#:195; N Pos. 4195
Seq#:197; N Pos. 830
Seq#:205; N Pos. 3103
Seq#:209; N Pos. 785,793,824
Seq#:220; N Pos. 16,33,34,74
Seq#:233; N Pos. 447
Seq#:236; N Pos. 146
Seq#:245; N Pos. 316,411
Seq#:275; N Pos. 502
Seq#:285; N Pos. 1544
Seq#:304; N Pos. 912
Seq#:310; N Pos. 671
Seq#:324; N Pos. 1508
Seq#:325; N Pos. 1222,1223,2378,2382,2427,2608
Seq#:334; N Pos. 803,807
Seq#:347; N Pos. 2863
Seq#:355; N Pos. 5912
Seq#:360; N Pos. 2289
Seq#:363; N Pos. 18
Seq#:365; N Pos. 519
Seq#:367; N Pos. 2039

VARIABLE LOCATION SUMMARY

PATENT APPLICATION: US/09/404,520A

DATE: 01/07/2004

TIME: 12:08:40

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

Seq#:403; N Pos. 73

Seq#:425; N Pos. 620

Seq#:426; N Pos. 1004

Seq#:439; N Pos. 47,50,68,138,162,165,243,250,264,272,298,299,301,302,334

Seq#:439; N Pos. 385,420,463,489,493,573

Seq#:441; N Pos. 423

Seq#:457; N Pos. 669

Seq#:460; N Pos. 4388,4397

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/404,520A

DATE: 01/07/2004

TIME: 12:08:40

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
 L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
 L:1363 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:24
 L:1363 M:283 W: Missing Blank Line separator, <400> field identifier
 L:1371 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:24
 L:1371 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:24
 L:1371 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:24
 L:1371 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:180
 L:1560 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:28
 L:1560 M:283 W: Missing Blank Line separator, <400> field identifier
 L:1584 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:28
 L:1584 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:28
 L:1584 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:28
 L:1584 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:660
 L:1925 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:33
 L:1925 M:283 W: Missing Blank Line separator, <400> field identifier
 L:1959 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:33
 L:1959 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:33
 L:1959 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:33
 L:1959 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:960
 L:2066 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:37
 L:2066 M:283 W: Missing Blank Line separator, <400> field identifier
 L:2106 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:37
 L:2106 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:37
 L:2106 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:37
 L:2106 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:1140
 L:2411 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:45
 L:2411 M:283 W: Missing Blank Line separator, <400> field identifier
 L:2431 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:45
 L:2431 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:45
 L:2431 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:45
 L:2431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:540
 M:341 Repeated in SeqNo=45
 L:2468 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:47
 L:2468 M:283 W: Missing Blank Line separator, <400> field identifier
 L:2692 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:47
 L:2692 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:47
 L:2692 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:47
 L:2692 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:6660
 L:2783 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:51
 L:2783 M:283 W: Missing Blank Line separator, <400> field identifier
 L:2793 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:51
 L:2793 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:51
 L:2793 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:51
 L:2793 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:240
 L:7706 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:80
 L:7706 M:283 W: Missing Blank Line separator, <400> field identifier
 L:7822 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:80

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/404,520A

DATE: 01/07/2004

TIME: 12:08:40

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

L:7822 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:80
L:7822 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:80
L:7822 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:3420
L:8087 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:84 ✓
L:8087 M:283 W: Missing Blank Line separator, <400> field identifier
L:8109 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:84
L:8109 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:84
L:8109 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:84
L:8109 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84 after pos.:600
L:9224 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:108 ✓
L:9224 M:283 W: Missing Blank Line separator, <400> field identifier
L:9232 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:108
L:9232 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:108 ✓
L:9232 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:108
L:9232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108 after pos.:180
L:9721 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:117 ✓
L:9721 M:283 W: Missing Blank Line separator, <400> field identifier
L:9747 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:117
L:9747 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:117
L:9747 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:117 ✓
L:9747 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:117 after pos.:720
L:9832 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:120 ✓
L:9832 M:283 W: Missing Blank Line separator, <400> field identifier
L:9836 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:120
L:9836 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:120
L:9836 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:120
L:9836 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:120 after pos.:60
L:10081 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:129 ✓
L:10081 M:283 W: Missing Blank Line separator, <400> field identifier
L:10103 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:129
L:10103 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:129
L:10103 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:129
L:10103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:129 after pos.:600
L:10596 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:141 ✓
L:10596 M:283 W: Missing Blank Line separator, <400> field identifier
L:10598 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:141
L:10598 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:141
L:10598 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:141
L:10598 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:141 after pos.:0
M:341 Repeated in SeqNo=141
L:10791 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:144 ✓
L:10791 M:283 W: Missing Blank Line separator, <400> field identifier
L:10839 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:144
L:10839 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:144
L:10839 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:144 ✓
L:10839 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:144 after pos.:1380
L:11010 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:149 ✓
L:11010 M:283 W: Missing Blank Line separator, <400> field identifier
L:11022 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:149

VERIFICATION SUMMARY

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:08:40

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

L:11022 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:149
L:11022 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:149 ✓
L:11022 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:149 after pos.:300
L:11285 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:154 ✓
L:11285 M:283 W: Missing Blank Line separator, <400> field identifier
L:11355 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:154
L:11355 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:154
L:11355 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:154 after pos.:2040
L:11964 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:166 ✓
L:11964 M:283 W: Missing Blank Line separator, <400> field identifier
L:11968 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:166 after pos.:60
L:13011 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:177 ✓
L:13011 M:283 W: Missing Blank Line separator, <400> field identifier
L:13033 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:177 after pos.:600
L:13638 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:183 ✓
L:13638 M:283 W: Missing Blank Line separator, <400> field identifier
L:13676 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183 after pos.:1080
M:341 Repeated in SeqNo=183
L:14911 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:195
L:14911 M:283 W: Missing Blank Line separator, <400> field identifier
L:15051 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:195 after pos.:4140
L:15118 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:197
L:15118 M:283 W: Missing Blank Line separator, <400> field identifier
L:15146 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:197 after pos.:780
L:15673 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:205
L:15673 M:283 W: Missing Blank Line separator, <400> field identifier
L:15777 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:205 after pos.:3060
L:16028 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:209
L:16028 M:283 W: Missing Blank Line separator, <400> field identifier
L:16056 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:209 after pos.:780
L:16661 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:220
L:16661 M:283 W: Missing Blank Line separator, <400> field identifier
L:16663 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:220 after pos.:0
M:341 Repeated in SeqNo=220
L:17374 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:233
L:17374 M:283 W: Missing Blank Line separator, <400> field identifier
L:17390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:233 after pos.:420
L:17457 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:236
L:17457 M:283 W: Missing Blank Line separator, <400> field identifier
L:17463 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:236 after pos.:120
L:17884 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:245
L:17884 M:283 W: Missing Blank Line separator, <400> field identifier
L:17896 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245 after pos.:300
M:341 Repeated in SeqNo=245
L:19129 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:275
L:19129 M:283 W: Missing Blank Line separator, <400> field identifier
L:19147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:275 after pos.:480
L:19734 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:285
L:19734 M:283 W: Missing Blank Line separator, <400> field identifier

VERIFICATION SUMMARY

DATE: 01/07/2004

PATENT APPLICATION: US/09/404,520A

TIME: 12:08:40

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

L:19786 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:285 after pos.:1500
L:20987 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:304
L:20987 M:283 W: Missing Blank Line separator, <400> field identifier
L:21019 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:304 after pos.:900
L:21306 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:310
L:21306 M:283 W: Missing Blank Line separator, <400> field identifier
L:21330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:310 after pos.:660
L:21915 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:324
L:21915 M:283 W: Missing Blank Line separator, <400> field identifier
L:21967 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:324 after pos.:1500
L:21988 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:325
L:21988 M:283 W: Missing Blank Line separator, <400> field identifier
L:22030 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:325 after pos.:1200
M:341 Repeated in SeqNo=325
L:22577 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:334
L:22577 M:283 W: Missing Blank Line separator, <400> field identifier
L:22605 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:334 after pos.:780
L:23450 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:347
L:23450 M:283 W: Missing Blank Line separator, <400> field identifier
L:23546 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:347 after pos.:2820
L:24201 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:355
L:24201 M:283 W: Missing Blank Line separator, <400> field identifier
L:24399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:355 after pos.:5880
L:24620 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:360
L:24620 M:283 W: Missing Blank Line separator, <400> field identifier
L:24698 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:360 after pos.:2280
L:24853 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:363
L:24853 M:283 W: Missing Blank Line separator, <400> field identifier
L:24855 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:363 after pos.:0
L:25104 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:365
L:25104 M:283 W: Missing Blank Line separator, <400> field identifier
L:25122 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:365 after pos.:480
L:25187 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:367
L:25187 M:283 W: Missing Blank Line separator, <400> field identifier
L:25255 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:367 after pos.:1980
L:28090 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:403
L:28090 M:283 W: Missing Blank Line separator, <400> field identifier
L:28094 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:403 after pos.:60
L:30085 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:425
L:30085 M:283 W: Missing Blank Line separator, <400> field identifier
L:30107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:425 after pos.:600
L:30118 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:426
L:30118 M:283 W: Missing Blank Line separator, <400> field identifier
L:30152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:426 after pos.:960
L:30961 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:439
L:30961 M:283 W: Missing Blank Line separator, <400> field identifier
L:31028 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:441
L:31028 M:283 W: Missing Blank Line separator, <400> field identifier
L:32189 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:457

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/404,520A

DATE: 01/07/2004

TIME: 12:08:40

Input Set : E:\ENU.corrected SEQ list 12.23.03.rpt.txt

Output Set: N:\CRF4\01072004\I404520A.raw

L:32189 M:283 W: Missing Blank Line separator, <400> field identifier
L:32294 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:460
L:32294 M:283 W: Missing Blank Line separator, <400> field identifier
L:32535 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:463
L:32535 M:283 W: Missing Blank Line separator, <400> field identifier
L:32598 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:464
L:32598 M:283 W: Missing Blank Line separator, <400> field identifier
L:13 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (44345) Counted (44347)